

9. Marker assisted shuttle breeding and gene pyramiding strategies for bringing durable resistance

K. V. Prabhu (ICAR) (10 mins)

Discussion point: Identify different centres for shuttle breeding, facilitate material movement, network members mobility and specify genes that can be put together for durability of resistance in local varieties (20 mins)

10. Quarantine strategy, sensitization and awareness generation

Ravi Khetarpal (ICAR) (10 mins)

Discussion point: Review and strengthen the most crucial regulation mechanisms at ports of entry and exit of wheat, capacity available and capacity building needs for officials at ports and technical options at quarantine laboratories (20 mins)

15.00 Hrs Tea

15.20 Hrs **Workshop IV: Capacity Building and Evolution of Networks**

Chair : G. Wall, FAO
Co-Chair : P. Fox, ACIAR
Rapporteur : A. K. Sharma, DWR

11. Training, human resource development and setting up regional laboratories, trap nurseries for detection of variants

Amor Yahyaoui and K. Nazari (ICARDA) (10 mins)

Discussion points: Assessment of the required human resources in each country, Identification of HRD centres, facilitation of trainings (short-term, medium term and continued), setting up of location specific regional laboratories for research data generation on rusts of wheat (20 mins)

12. Genetic material exchange and enhancement for high yield with wide adaptation

O. Abdalla (ICARDA) (10 mins)

Discussion points: Facilitation of genetic material exchange, exploration of its utilization among members of network, sharing the same for enhancing as a common genetic resource (20 mins)

13. Rapid response and contingency plans

Wafa Khoury (FAO) (10 mins)

Discussion points: Development of implementable measures in the event of an outbreak of the disease, identify agencies for immediate emergency controls in the region and sending alarms for preventive control among members of network along the path; develop a cooperative regional body to coordinate the rapid response implementation (20 mins.)

17.00 Hrs

1. Chair, Co-Chair and Rapporteurs of Workshops to assemble separately for preparation of summary recommendations of workshops
2. Group meeting of India and FAO to prepare draft Delhi Declaration

20.30 Hrs Dinner

DAY 3: NOVEMBER 8, 2008

Open House Discussion and Presentation of Recommendations

Chair : Mangala Rai, ICAR
Co-Chair : T. Nanda Kumar, DAC
Co-Chair : P. Kenmore, FAO

9.00 Hrs

Presentation of the recommendations, roadmap and finalization of Delhi declaration (Chair/Co-Chair of all sessions) (5-10 mins each)

9.30 Hrs

Open house discussion on recommendations, roadmap and strategies to be adopted among the network countries

11.00 Hrs Tea

11.30 Hrs **Valedictory Function**

Chief Guest : Hon'ble Union Agriculture Minister, GOI
Remarks : Mangala Rai, Secy., DARE & DG, ICAR
Remarks : M. Traore, ADG, FAO

1. Presentation of Recommendations
2. Delhi Declaration
3. Address by Chief Guest
4. Vote of Thanks: P. L. Gautam, ICAR

13.00 Hrs Lunch

14.30 Hrs **Visit to Museum, NASC
Visit to IARI and NBPGR**

International Conference on Wheat Stem Rust Ug99 – A Threat to Food Security

**November 6-8, 2008
New Delhi, India**

Programme



Programme
International Conference on
Wheat Stem Rust Ug99 -A Threat to Food Security

DAY 1 : NOVEMBER 6, 2008

Venue: A.P. Shinde Symposia Hall, NASC Complex

08.30 Hrs	Registration	
09.00 Hrs	Inaugural Session	
09.00 Hrs	Welcome & Opening Remarks	Mangala Rai, Secy., DARE & DG, ICAR
09.10 Hrs	Ug99: Global Status	R. P. Singh, CIMMYT
09.20 Hrs	Remarks	M. Traore, ADG, FAO
09.30 Hrs	Statements	Hon'ble Ministers from SAARC Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka
10.15 Hrs	Presidential Address	Shri Sharad Pawar Hon'ble Union Agriculture Minister, India
10.30 Hrs	Vote of Thanks	A.K. Upadhyay, DARE & ICAR
10.35 Hrs	Tea	

11.00 Hrs Technical Session I: Evolution and Status of Ug99

Chair : **T. Lumpkin, CIMMYT**
Co-Chair : **R. Coffman, BGRI**
Rapporteur : **R. Chatrath, DWR**

1. Origin, evolution, distribution and virulence of Ug99 and Global Stem Rust Monitoring System
Z. A. Pretorius (Uni. of Free State, S. Africa) and R. F. Park (Uni. of Sydney, Australia)
2. Status and impact of Ug99 in affected countries
R. Wanyera (Kenya)
Bedada (Ethiopia)
Representative (Yemen)
Representative (Iran)
Representative (Sudan)
3. Disease surveillance concepts, practices including GIS imagery and tracking
A. Yahyaoui and Kumarse Nazari (ICARDA)

13.00 Hrs Lunch

14.00 Hrs Technical Session II: Strategies and Options against Ug99

Chair : **Mahmoud Solh, ICARDA**
Co-Chair : **P. L. Gautam, ICAR**
Rapporteur : **M. Saharan, DWR**

4. Race specific resistance genes and their utilization
H. Bariana (Uni. of Sydney, Australia)
5. Adult plant (slow rusting) resistance and its utilization
R. P. Singh (CIMMYT)
6. Operation of East Africa Ug99 resistance screening facilities
D. Singh (CIMMYT)
7. Gene discovery, allele mining, development and application of molecular markers, function assignment and development of immune response system
E. Lagudah (CSIRO, Australia)
8. Durable Rust Resistance in Wheat: Executive Summary of DRRW Meet held at Shimla; November 3-4, 2008
B. Mishra (ICAR)

16.30 Hrs Tea

17.00 Hrs Meetings of the Chairs, Co-Chairs and Rapporteurs separately to finalize the Recommendations of Technical Sessions

19.30 Hrs On-line Video Conference with Dr. N.E. Borlaug from Ithaca, Cornell

20.30 Hrs Dinner

DAY 2 : NOVEMBER 7, 2008

Venue: ICAR Conference Facilities, II Floor

9.00 Hrs Workshop I: Epidemiology and Management

Chair : **Peter Kenmore, FAO**
Co-Chair : **S. N. Shukla, ICAR**
Rapporteur : **G. P. Singh, IARI**

1. Global rust initiative - A case to initiate regional networks
R. Coffman and R. Ward (Cornell, USA) (15 mins)
Discussion point: Can there be networks involving countries sharing a fixed geographic radius? (20 mins)
2. Gene deployment: Indian Experience
M. Prashar (ICAR) (10 mins)
Discussion point: Degree of preparedness with disease spectrum based varietal availability in participating countries (20 mins)

3. Seed production and saturation with resistant varieties
T. Osborn, FAO and Z. Bishaw (ICARDA) (10 mins)
Discussion point: Seed production strengths, optimizing seed systems, storability and capacity in quick spreading within a fixed time period with Ug99 resistant varieties. Can the countries produce a specific variety to be shared? (20 mins)
4. Chemical and cultural management of Ug99: R. Wanyera (Kenya) (10 mins)
Discussion point: A short-term prophylactic options of immediate control of Ug99 in the event of a spread. What is the volume of technologies required to be available as a contingency measure? Can these be stocked and shared? (15 mins)

11.00 Hrs Tea

11.15 Hrs Workshop II: Ecological and Local Factors for Monitoring and Containing Ug99

Chair : **R. Brettell, ICARDA**
Co-Chair : **R. F. Park, PBI**
Rapporteur : **Ms. Indu Sharma, PAU**

5. Perpetuation of Ug99- alternate, collateral and volunteer hosts: (Iran) (10 mins)
Discussion points: Country and location specific mechanisms to minimize, eradicate and isolate alternative hosts of stem rust while conserving the genetic diversity in wheat and related species (20 mins)
6. Survey & surveillance and development of early warning and decision support systems: Rick Ward (BGRI) (10 mins)
Discussion point: Mechanisms available and those which need to be developed for an uninterrupted monitoring along the path (Countries to adopt a common method of sampling, collation and evaluation) (20 mins)
7. Development of trap nurseries: cooperative screening, evaluation, virulence monitoring, variants detection: G.O. Ferrara (CIMMYT) (10 mins)
Discussion point: In addition to surveillance, explore a distinct possibility of sharing a common reference set of wheat varieties in each country, with a region-specific sequentially higher level of genetic resistance increasing radially away from the centre (Uganda/Kenya) (20 mins)

12.45 Hrs Lunch

13.30 Hrs Workshop III: Information Sharing, Technical Backstopping and Strengthening Variety Development

Chair : **S. Rajaram**
Co-Chair : **B. Mishra, ICAR**
Rapporteur : **Ms. Anju Mahendru, IARI**

8. Database generation and exchange of information: K. Cressman (FAO) (10 mins)
Discussion point: To agree on sharing a common series of data inputs from disease spread, virulence, resistance genes, breeding initiatives, progress in selection, pedigree information of each population, real-time data sharing, modalities and methods of protecting information and confidentiality arrangements (20 mins)